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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/761,352

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Hideo Satoh

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03/28/2006

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EXAMINER

SEVER, ANDREW T

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/761,352

Applicant(s)

SATO ET AL.

Examiner

Andrew T. Sever

Art Unit

2851



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,10-14,16 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,15,17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 2, 4, 10-14,16, and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/29/2005.

### ***Drawings***

2. The drawings were received on 1/12/2006. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5, 6, 8, 9, 15, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sergay Malkin (EP 0 887 783 A2 as provided by the applicant in applicant's IDS dated 5/13/2004).

Malkin teaches in figure 1 an image display apparatus comprising:

At least two linear image display device (10, there are four devices) for respectively displaying linear images in response to image signals; and

A moving mechanism section for periodically moving the at least two linear image display devices along at least two locus planes separated from each other (they are not co-planar) and substantially parallel to each other (at least the opposite pair move parallel to each other, see page 4 first paragraph lines 1-11 for a description of the arrays being moved)

*With regards to applicant's claim 5:*

Part 20 is described as an opaque barrier, which would inherently reduce reflections and therefore would qualify as an antireflective device. Since it is in the center along with other areas it is in parallel to the locus planes.

*With regards to applicant's claim 6:*

The image display device comprises of a plurality of light emitting diodes (see line 4 of page 4 for example).

*With regards to applicant's claim 8:*

See figure 5 which shows the drive mechanism for transmitting rotational movement, and since rotational movement is along a horizontal direction, it qualifies as causing horizontal movement.

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*With regards to applicant's claim 9:*

At any given moment 2 of the displays have movement components that are horizontal movement perpendicular to a display direction.

*With regards to applicant's claims 15, 19, and 20:*

See above with regards to claim 1, 5, and 6 respectively.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 3, 7, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sergay Malkin (EP 0 887 783 A2) as applied to claims 1, 5, 6, 8, 9, 15, 19 and 20 above, and further in view of Chakrabarti (US 6,005,608 as cited in the previous office action).

As described in more detail above Malkin teaches a display apparatus which among other things comprises of a moving section, however Malkin does not teach that the moving mechanism comprises of a pair of pulleys pulling a belt or chain member with the display member disposed on the belt at different locations. Chakrabarti teaches in figure 7 a stereoscopic display device, which includes a pair of rotating shafts (shaft connected to 30b and 32 b from motor 18b) and a pair of belt members extended between a pair of pulleys (pulleys 32b and 30b; belts 38b and 40b), two display means (12) are attached to the belt members. Chakrabarti teaches in column 1 lines 41-53 that prior art-rotating systems such as Malkin are bulky, large, and heavy, as well as generate excessive noise and vibration which would hinder the appreciation of a moving image. The system of Chakrabarti for moving the display means however is reliable, and relatively inexpensive while having low noise and vibration (since the belt obviously would absorb at least some of the vibrations caused by the motor.) Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the display means of Malkin on a pulley system such as taught by Chakrabarti.

*With regards to applicant's claim 7:*

Although not shown obviously a second rod exists between pulleys 22b and 24b.

*With regards to applicant's claim 17:*

See above.

***Response to Arguments***

8. Applicant's arguments filed 1/12/2006 have been fully considered but they are not persuasive.

Applicant first argues that Malkin does not teach a “stereoscopic image display apparatus”. While it is true that Malkin is not specifically state that it is stereoscopic, it could be used as either a stereoscopic display or in a stereoscopic display, which is all that is required by applicant's claim. The stereoscopic limitation of the preamble of the claim is simply an intended use of the apparatus claimed. The term stereoscopic does not impart any distinct definition of any of the claimed invention's limitations nor any specific structural limitations. Therefore applicant's arguments are not found persuasive, see *Pitney Bowes, Inc. v. Hewlett-Packard Co.* 51 USPQ2d 1161, 1165 (Fed Cir. 1999) also *Rowe v. Dror*, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997). Since Malkin contains all the structural limitations of the claim; it meets the requirement of being the claimed stereoscopic display.

With regards to the new claim language of being “separated from each other” it is clear that Malkin's linear image display devices are separate from each (they do not touch each other except indirectly through the support structure of the disc).

With regards to the combination of Malkin and Chakrabarti, the teachings of Chakrabarti do not fundamentally change the operation of the Malkin reference. A rotating disk and a pulley system achieve the same affect of a moving reciprocating display and as taught by Chakrabarti the pulley system results in a better moving display then the prior art system of the disc as taught by Malkin. Further although the light source of the Chakrabarti apparatus is stationary, the display (the object looked upon by a user) is the screens which are clearly moving in a similar fashion to that of Malkin. Accordingly applicant's arguments are not persuasive and the rejections have been repeated and made final.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS



**William Perkey**  
**Primary Examiner**